COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

March 3, 2009

IN REPLY PLEASE
REFER TO FILE:

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

PARTICIPATE IN THE
HERMOSA STRAND INFILTRATION TRENCH PROJECT
(SUPERVISORIAL DISTRICT 4)
(3 VOTES)

SUBJECT

This action requests authorization for the Director of Public Works or her designee to enter into an agreement with the City of Hermosa Beach in the development of Phase I of the Hermosa Strand Infiltration Trench Project.

IT IS RECOMMENDED THAT YOUR BOARD ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT:

1. Consider the Negative Declaration prepared and adopted by the City of Hermosa Beach as lead agency, together with any comments received during the public review process; certify that your Board has independently considered and reached its own conclusions regarding the environmental effects of the project as shown in the Negative Declaration; and approve the project.

2. Authorize the Director of Public Works or her designee to execute a Memorandum of Agreement with the City of Hermosa Beach to establish the development, operations, and maintenance responsibilities of each party for the Hermosa Strand Infiltration Trench Project.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended action is to consider the previously adopted Negative Declaration and allow the Los Angeles County Flood Control District (LACFCD) to partner with the City of Hermosa Beach (City) to develop the design for Phase I of the Hermosa Strand Infiltration Trench Project. Phase I of the project will divert and treat urban runoff from the LACFCD's Hermosa Beach Pier storm drain.

Implementation of Strategic Plan Goals

The Countywide Strategic Plan directs the provision of Service Excellence (Goal 1), Organizational Effectiveness (Goal 3), and Fiscal Responsibility (Goal 4) by utilizing a collaborative approach toward enhancing water quality, thereby improving the quality of life for citizens of the County of Los Angeles.

FISCAL IMPACT/FINANCING

In May 2007 the City received a State Water Resources Control Board Clean Beach Initiative Grant in the amount of $1,720,800 for the proposed Hermosa Strand Infiltration Trench Project. In accepting the grant, the City agreed to initially develop Phase I of the project and provide matching funds in the amount of $160,000 toward the $800,000 projected Phase I cost. The attached Memorandum of Agreement (MOA) will commit the LACFCD to provide construction documents for Phase I of the project as in-kind services. The City will adopt the plans and specifications prepared by the LACFCD and advertise the project for construction bids in 2009. Sufficient funds are available in the Fiscal Year 2007-08 Flood Control District Budget to cover the LACFCD's project expenses.

There will be no impact to the County General Fund.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The California Regional Water Quality Control Board, Los Angeles Region, adopted Resolution No. 2002-004, the Santa Monica Bay Beaches Bacteria Total Maximum Daily Load (TMDL) for dry weather on January 24, 2002. This TMDL was subsequently approved by the United States Environmental Protection Agency and became effective on July 15, 2003. The TMDL requires that the City implement projects, activities, and programs that will help reduce bacteria levels to achieve compliance. The LACFCD will benefit by improving the quality of water being discharged from its drain onto the public beaches.

The proposed Hermosa Strand Infiltration Trench Project will be divided into two phases. Phase I of the proposed project includes installation of a low-flow diversion for the LACFCD's Hermosa Beach Pier storm drain to divert dry-weather urban runoff through a pretreatment unit and into an engineered infiltration trench. The project will utilize the unsaturated native sands to filter, treat, and infiltrate this runoff before it reaches the saline water table below. The trench will be constructed against the ocean side of the 18-foot-deep cutoff wall that supports the Strand walkway, which is approximately 300 feet from the shoreline. The project will also include a monitoring program to demonstrate the effectiveness of native sand filtration for treating urban runoff. If postconstruction monitoring of this project successfully demonstrates effective treatment, the City will develop Phase II of the project. Phase II of the project includes installation of nine additional low-flow diversions at storm drains located along a 1.5-mile stretch of beach between Herondo Street and 26th Street in the City of Hermosa Beach. The City will be solely responsible for the implementation of Phase II of the project.

The attached MOA has been reviewed and approved as to form by County Counsel.

ENVIRONMENTAL DOCUMENTATION

In executing the MOA with the City, the LACFCD is acting as a responsible agency for the Hermosa Strand Infiltration Project. The City, as lead agency, has prepared an initial study, consulted with the County, and adopted a Negative Declaration on June 26, 2007, for Phase I of the project.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The project will reduce urban runoff discharged into the Santa Monica Bay.

There is no adverse impact on current services.

CONCLUSION

Please return three approved copies of this letter and four executed copies of the MOA to the Department of Public Works, Watershed Management Division.

Respectfully submitted,

GAIL FARBER
Director of Public Works

GF:MP:lm

Attachment

c: Chief Executive Office (Lari Sheehan)
County Counsel

MEMORANDUM OF AGREEMENT
HERMOSA STRAND INFILTRATION TRENCH PROJECT

THIS MEMORANDUM OF AGREEMENT (hereinafter referred to as AGREEMENT), made and entered into by and between the CITY OF HERMOSA BEACH, a municipality in the County of Los Angeles (hereinafter referred to as CITY), and the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, a body corporate and politic (hereinafter referred to as LACFCD).

WITNESSETH

WHEREAS, CITY has been issued a State Water Resources Control Board Clean Beaches Initiative (CBI) Grant in the amount of One Million Seven Hundred Twenty Thousand Eight Hundred and 00/100 Dollars ($1,720,800.00) for the planning, design, and construction of the Hermosa Strand Infiltration Trench Project (hereinafter referred to as PROJECT); and

WHEREAS, PROJECT consists of two (2) phases (hereinafter referred to as PHASE I and PHASE II); and

WHEREAS, CITY in accepting the CBI Grant agreed to provide twenty percent (20%) of the grant amount in matching funds (hereinafter referred to as GRANT MATCH), in the amount of Three Hundred Thousand and 00/100 Dollars ($300,000.00) toward PROJECT; and

WHEREAS, CITY requested LACFCD to partner in the development of PROJECT by providing services for the design of PHASE I at LACFCD'S expense; and

WHEREAS, PROJECT includes the development of ten (10) low-flow diversions at storm drains located along a 1.5-mile stretch of beach between Herondo Street and 26th Street in CITY (as shown in Exhibit A) and will divert dry-weather urban runoff through pretreatment units and into an engineered infiltration trench that will utilize the unsaturated native sands to filter, treat, and infiltrate this runoff before it reaches the saline water table below; and

WHEREAS, PHASE I consists of the planning, design, and construction of a low-flow diversion (LFD) at the Hermosa Beach Pier storm drain (also known as Pier Avenue Drain), which is owned and operated by LACFCD; an adjoining one thousand (1,000)-foot segment of engineered infiltration trench in which to divert the storm drain's urban runoff; and a water quality monitoring well; and

WHEREAS, if postconstruction water quality monitoring of PHASE I LFD successfully demonstrates effective urban runoff treatment to the State Water Resources Control Board, CITY alone will develop PHASE II; and

WHEREAS, PHASE II consists of the planning, design, and construction of nine (9) LFDs and engineered infiltration trench along the remaining 1.5-mile stretch of beach as shown in Exhibit A; and

WHEREAS, LACFCD and CITY desire to enter into an Agreement to establish the development, operations, and maintenance responsibilities of each party for PHASE I of PROJECT.

NOW, THEREFORE, in consideration of the mutual benefits to be derived by CITY and LACFCD and of the premises herein contained, the parties hereby agree as follows:

(1) DEFINITIONS:

a. PRELIMINARY ENGINEERING, as referred to in this AGREEMENT, shall mean development of the concept design for PHASE I, environmental documentation and permitting, hydrologic analysis, traffic detour plan, etc.

b. DESIGN, as referred to in this AGREEMENT, shall mean design, survey, utility investigation, hydraulic analysis, geotechnical investigation, and preparation of drainage, mechanical, and electrical plans, which includes an aboveground control panel, technical specifications, and cost estimates for PHASE I.

c. CONSTRUCTION ENGINEERING, as referred to in this AGREEMENT, shall mean engineering work necessary to ensure compliance with the final plans and any required changes and modifications to final plans for PHASE I necessitated by unforeseen or unforeseeable field conditions encountered during the construction of PHASE I.

d. PHASE I CONSTRUCTION INSPECTION, as referred to in this AGREEMENT, shall mean inspection and material testing of construction work to cause PHASE I to be constructed in accordance with the approved plans.

e. CONSTRUCTION COSTS, as referred to in this AGREEMENT, shall consist of costs related to the construction contract, construction, contract administration, construction survey, utility relocation, traffic detours, final signing and stripping, and all other work necessary to construct PHASE I in accordance with CITY-approved bid documents, which include all plans and specifications for PHASE I. CONSTRUCTION COSTS shall not include the cost of PRELIMINARY ENGINEERING, DESIGN, CONSTRUCTION ENGINEERING, and CONSTRUCTION INSPECTION.

(2) CITY AGREES:

a. To secure the CBI Grant funding.

b. To perform CBI Grant administration, management, and submittal of all required reports.

c. To perform a portion of PRELIMINARY ENGINEERING, which involves environmental documentation and permitting (coastal permits, etc.), hydrologic analysis, traffic detour plan (if needed), and all necessary work, except DESIGN, prior to advertising PHASE I for construction bids.

d. To prepare and obtain any necessary documents or approvals required to comply with the California Environmental Quality Act.

e. To prepare the Project Assessment and Evaluation Plan for PHASE I.

f. To perform CONSTRUCTION ENGINEERING and manage the related CONSTRUCTION COSTS with grant funding.

g. To make an effort to obtain community support for PHASE I.

h. To prepare a Monitoring Plan, perform all monitoring, and submit all related reports as required by the CBI Grant.

i. To be responsible for the water quality sampling and monitoring, documenting the effectiveness of PHASE I on a regular basis (based on the CBI Grant Schedule), and sharing data and data analysis results with LACFCD.

j. To develop the Quality Assurance Project Plan for PHASE I.

k. To install an array of temporary monitoring wells between the infiltration trench and the shoreline in accordance with Monitoring Plan for PHASE I.

l. To review and approve the final design plans for PHASE I.

m. To advertise PHASE I for construction bids, award and administer the construction contract, perform construction survey, change or modify plans as needed subject to LACFCD written approval.

n. To be responsible for and pay all necessary costs associated with the operation and maintenance of PHASE I with regards to the filtration unit and infiltration trench.

o. To ensure that CITY's contractor adds the County of Los Angeles, LACFCD, and their officers, employees, and agents as additional

insured on their insurance policies, including comprehensive general liability and automobile policies, with the minimum limits of coverage per Subsection 7-3 of the Standards Specifications for Public Works Construction.

p. To maintain PHASE I filtration unit and infiltration trench.

q. To abide by the conditions of the client license/agreement, which would allow CITY to access LACFCD'S telemetry system.

r. To submit change orders, associated with the project, to LACFCD for review and approval prior to acceptance and incorporation of said change order for construction.

s. To construct PROJECT based on Standard Specifications for Public Works Construction (2003 Edition with Additions/Amendments of November 2003 and 2004 Supplement) and in accordance with the approved design plans and specifications.

(3) LACFCD AGREES:

a. To provide design services for PHASE I in the form of DESIGN, which is limited to developing the project design concept and the FINAL DESIGN, as required at LACFCD'S expense.

b. To maintain the LFD structure constructed during PHASE I, including the pump and discharge line, which leads to the filtration unit.

c. To maintain the telemetry system for the constructed LFD structure, water level, pumps, etc., of PHASE I.

d. To grant CITY permission to use LACFCD'S right of way for the purposes of PHASE I.

(4) IT IS MUTUALLY UNDERSTOOD AND AGREED AS FOLLOWS:

a. CITY will complete the construction of PHASE I within twelve (12) months from the date this AGREEMENT is executed. Failure to do so shall give LACFCD the right to cause the provisions of this AGREEMENT to be null and void. Notwithstanding the foregoing, if CITY is delayed or hindered from completion of construction of PHASE I by reason of FORCE MAJEURE, then the COMPLETION DATE shall be extended for a period equivalent to twelve (12) months. FORCE MAJEURE shall mean the unforeseeable refusal to grant or denial, revocation, or moratorium of or by applicable governmental authorities of building permits, unreasonable delays in obtaining governmental approvals or delays due to strikes, inclement weather, fire, acts of God, riot, insurrection, or war.

b. CITY shall have the right to reject all bids after notifying LACFCD and may readvertise PHASE I if such action is in the best interest of CITY and LACFCD as mutually agreed.

c. Each party shall have no financial obligation to the other party under this AGREEMENT, except as herein expressly provided.

d. Neither LACFCD nor any officer or employee of LACFCD shall be responsible for any damage or liability occurring by reason of any acts or omissions on the part of CITY under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of CITY under this AGREEMENT. It is also understood and agreed that, pursuant to Government Code, Section 895.4, CITY shall fully indemnify, defend, and hold LACFCD harmless from any liability imposed for injury (as defined by Government Code Section 810.8) occurring by reason of any acts or omissions on the part of CITY under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of CITY under this AGREEMENT.

e. Neither CITY nor any officer or employee of CITY shall be responsible for any damage or liability occurring by reason of any acts or omissions on the part of LACFCD under or in connection with any work, authority, or under this AGREEMENT. It is also understood and agreed that, pursuant to Government Code Section 895.4, LACFCD shall fully indemnify, defend, and hold CITY harmless from any liability imposed for injury (as defined by Government Code Section 810.8) occurring by reason of any acts or omissions on the part of LACFCD under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of LACFCD under this AGREEMENT.

f. In contemplation of the provisions of Section 895.2 of the Government Code of the State of California imposing certain tort liability jointly upon public entities solely by reason of such entities being parties to an agreement (as defined in Section 895 of said Code), each of the parties hereto, pursuant to the authorization contained in Sections 895.4 and 895.6 of said Code, will assume the full liability imposed upon it or any of its officers, agents, or employees by law for injury caused by any act or omission occurring in the performance of this AGREEMENT to the same extent that such liability would be imposed in the absence of Section 895.2 of said Code. To achieve the above-stated purpose, each of the parties indemnifies and holds harmless the other party for any liability, cost, or expense that may be imposed upon such other party solely by virtue of said Section 895.2. The provisions of Section 2778 of the California Civil Code are made a part hereof as if incorporated herein.

g. Any notices to be given or documents to be delivered by LACFCD or CITY to the other party may be delivered in person or through the United States mail and addressed to the party for whom intended as follows:

LACFCD: Ms. Gail Farber
Director of Public Works
County of Los Angeles
Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460
Telephone: (626) 458-4002
FAX: (626) 457-8897

CITY: Mr. Richard Morgan, P.E.
Director of Public Works/City Engineer
City of Hermosa Beach
1315 Valley Drive
Hermosa Beach, CA 90254-3884
Telephone: (310) 318-0214
FAX: (310) 937-5015

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IN WITNESS WHEREOF, the parties hereto have caused this MEMORANDUM OF AGREEMENT to be executed on their behalf, respectively, as follows:

LOS ANGELES COUNTY FLOOD
CONTROL DISTRICT
a body corporate and politic

By _____ Date _____
Director of Public Works

ATTEST:

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.
County Counsel

By _____
Deputy

CITY OF HERMOSA BEACH

By _____ Date _____
ART YOON, Mayor

ATTEST:

By _____
ELAINE DOERFLING, City Clerk

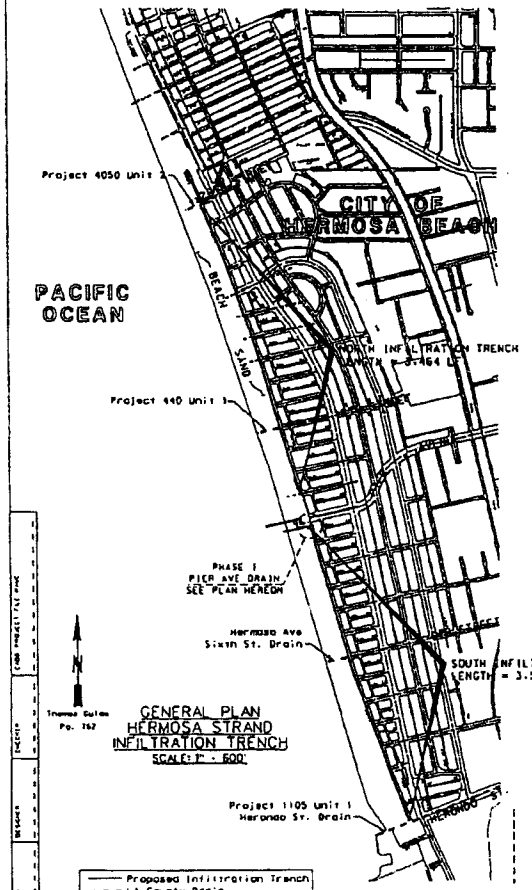
APPROVED AS TO FORM:

By _____
MICHAEL JENKINS, City Attorney

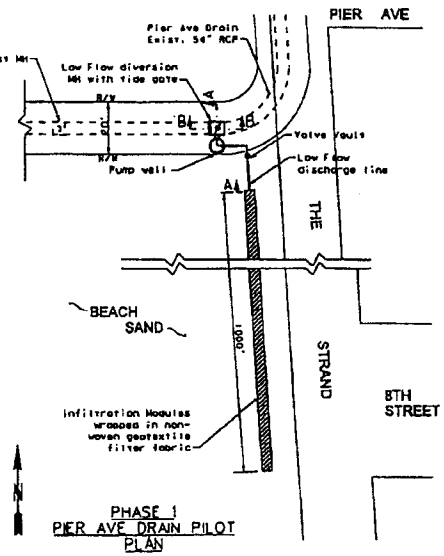
P:\wmpub\Secretarial\2008 Documents\Agreements\Hermosa Bch County- AGREEMENT (8-1-07).doc\C08267

EXHIBIT A

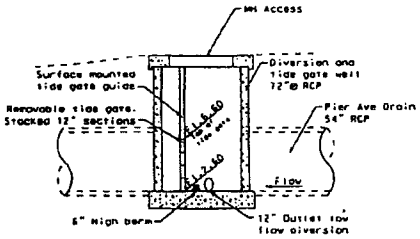
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
HERMOSA STRAND INFILTRATION TRENCH



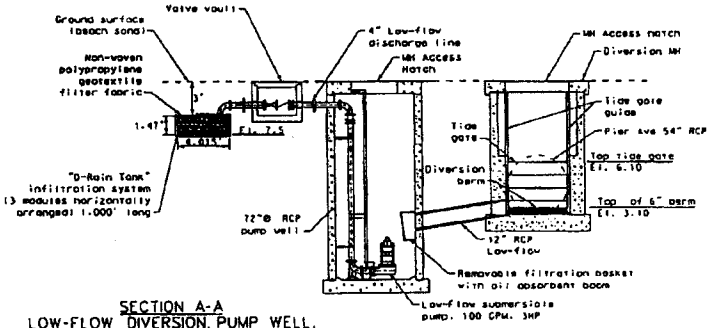
GENERAL PLAN
HERMOSA STRAND
INFILTRATION TRENCH
SCALE: 1" = 600'



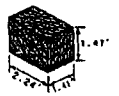
PHASE 1
PIER AVE DRAIN PILOT
PLAN



SECTION B-B
LOW-FLOW DIVERSION AND
TIDE GATE MANHOLE



SECTION A-A
LOW-FLOW DIVERSION, PUMP WELL
AND INFILTRATION TRENCH



"D-RAIN TANK"
SINGLE MODULE DIMENSIONS

Notes
1. Elevations shown are in feet above Mean Sea Level. NAVD '29 datum
2. Pier Ave. Drain, Hermosa Ave. Sixth Street Drain, and Project 1105 are under tidal influence and will require pump well to divert the low flow to the infiltration trench, as shown in Phase I detail. The remaining County and City drains will have gravity flow diversions to the infiltration trench.

DESIGNED BY	Joshua Svensson 1/30/07
SUBMITTED BY	Zahid Ataahan 1/30/07

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
HERMOSA STRAND
INFILTRATION TRENCH
PHASE I - PIER AVE DRAIN PILOT
PROJECT CONCEPT
JOB EP203L1056 SHEET 1 OF 1

EXHIBIT "A"

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact

ENVIRONMENTAL CHECKLIST FORM

1. **Project Title** "Hermosa Strand Infiltration Trench—Phase I": Proposition 50 Clean Beaches Initiative Recommended Project No. 10153

2. **Project Location:** Hermosa Strand at Pier Avenue

3. **Project Sponsor:** Department of Public Works, City of Hermosa Beach

4. **Lead Agency :** City of Hermosa Beach
1315 Valley Drive
Hermosa Beach, CA 90254

5. **Contact Person:** Ken Robertson, Senior Planner - (310) 318-0242

6. **General Plan Designation:** Open Space (OS) 7. **Zoning:** OS

8. **Description of Project:** The Hermosa Strand Infiltration Trench Project (Project) is being proposed in order to eliminate shoreline water quality exceedances of bacteria standards for human body contact recreational activities such as swimming and surfing (REC-1) attributed to storm drain discharges during summer dry weather. The project will also eliminate odor and vector problems caused by standing water in the Pier Avenue storm drain and should achieve measurable reductions in winter dry weather REC-1 exceedances.

   Year-round dry-weather flows from the Pier Avenue storm drain will be diverted to an infiltration trench constructed of prefabricated modular cells. The trench system will be installed below-grade against the ocean side of the cutoff wall that supports the Strand walkway that extends more than 14 feet deep and is located approximately 300 feet from the shoreline. Three to four feet of unsaturated native sand below the trench will provide filtration and treatment of the urban runoff before it reaches the saline water table below. The drain is subject to tidal influence so a diversion manhole with a berm and removable tide gate will be constructed in the Pier Avenue storm drain to prevent seawater from entering the system during operation and to direct low flow urban runoff into a pump well equipped with a trash basket and absorbent boom. The pump will divert low flow urban runoff into the adjoining infiltration trench.

9. **Surrounding Land Uses and Settings:** The subject site is located at the westerly end of Pier Plaza where it terminates at the Strand walkway. The project is adjacent to the commercial downtown district which is an urban setting. The commercial downtown district consists of eating and drinking establishments, retail uses, business services, and some nonconforming residential uses. Public parking lots A (11th Street) and C (13th Street) are located nearby. The beach on which the subject site is located extends north and south of the site and is a popular recreational beach.

10. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.)

    - Coastal Development Permit, California Coastal Commission
    - Los Angeles County Flood Control District
    - California State Water Resources Control Board, Division of Financial Assistance, Proposition 50 Clean Beaches Grant Program

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Land Use and Planning	☐ Transportation/Circulation	☐ Public Services
☐ Population and Housing	☐ Biological Resources	☐ Utilities and Service Systems
☐ Geological Problems	☐ Energy and Mineral Resources	☐ Aesthetics
☐ Water and Water Quality	☐ Hazards	☐ Cultural Resources
☐ Air Quality	☐ Noise	☐ Recreation
	☐ Mandatory Findings of Significance	

DETERMINATION.

(To be completed by the Lead Agency.)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☒

I find that although the proposed project could have a significant effect on the environment, that there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project MAY have a significant effect on the environmental, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. ☐

Signature

Ken Robertson
Printed Name

5/17/07
Date

Staff Environmental Review Committee
For

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
I. LAND USE AND PLANNING. *Would the proposal:*				
a) Conflict with general plan designation or zoning?	☐	☐	☐	☒
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☐	☐	☒
c) Be incompatible with existing land use in vicinity?	☐	☐	☐	☒
d) Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☐	☐	☒
e) Disrupt or divide the physical arrangement of an established community (including a low income or minority community)?	☐	☐	☐	☒

I-a thru e: The project site is designated open space and the project will be compatible with the surroundings (see project description).

II. POPULATION AND HOUSING. *Would the proposal:*				
a) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
b) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructures?	☐	☐	☐	☒
c) Displace existing housing, especially affordable housing?	☐	☐	☐	☒

II. a-c The project will result in no impact on population and housing.

III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:				
a) Fault rupture?	☐	☐	☐	☒
b) Seismic ground shaking?	☐	☐	☒	☐

Issues (and Supporting Information Sources):		Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Seismic ground failure, including liquefaction?	☐	☐	☐	☒
d)	Seiche, tsunami, or volcanic hazard?	☐	☐	☐	☒
e)	Landslides or mudflows?	☐	☐	☐	☒
f)	Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?	☐	☐	☒	☐
g)	Subsidence of the land?	☐	☐	☒	☐
h)	Expansive soil?	☐	☐	☐	☒
i)	Unique geologic or physical features?	☐	☐	☐	☒

III-a-i The project will not be overlain by any structures but will be adjacent to the strand wall. Collapse or destruction of the infiltration trench in the event of severe storm, tsunami or seismic event is not expected to have any direct effect on the stability of the strand wall under these conditions.

III-b During the life of the project it may be subject to a major earthquake, which may cause damage to the project but would not be expected to endanger people.

III-d There is no potential for either seats or volcanic activity at the subject site. The project will not impact or increase the hazards associated with a tsunami.

III-e The project site is in a developed area which is characterized by low topographic relief. Landslides and mudflows are thus not considered to be hazards in the project area.

III f-g Erosion and subsidence as well as other potential geotechnical hazards will be evaluated and addressed by geotechnical studies required as part of the plan review process. It is expected that any such hazards can be addressed through routine engineering design employed in the area.

III-h The potential for encountering expansive soils at the project site is considered to be low, as sandy soils, such as those characterizing the project area, are not considered expansive.

III-i The project site contains no unique geologic or physical features.

Sources:
City or Hermosa Beach General Plan, Seismic Safety Element

Issues (and Supporting Information Sources):		Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	**WATER AND WATER QUALITY.** *Would the proposal result in:*				
a)	Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	☐	☐	☐	☒
b)	Exposure of people or property to water related hazards such as flooding?	☐	☐	☒	☐
c)	Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?	☐	☐	☐	☒
d)	Changes in the amount of surface water in any water body?	☐	☐	☐	☒
e)	Changes in currents, or the course or direction of water movements?	☐	☐	☒	☐
f)	Storm water system discharges from areas for materials storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage delivery or loading docks, or other outdoor work areas?	☐	☐	☐	☒
g)	A significantly harmful increase in the flow rate or volume of storm water runoff?	☐	☐	☐	☒
h)	A significantly harmful increase in erosion of the project site or surrounding areas?	☐	☐	☒	☐
i)	Storm water discharges that would significantly impair the beneficial uses of receiving waters or areas that provide water quality benefits (e.g. riparian corridors, wetland, etc.)?	☐	☐	☐	☒
j.)	Harm to the biological integrity of drainage systems and water bodies?	☐	☐	☐	☒
k)	Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	☐	☐	☒	☐
l)	Altered direction or rate of flow of groundwater?	☐	☐	☒	☐
m)	Impacts to groundwater quality?	☐	☐	☒	☐
n)	Substantial reduction in the amount of groundwater	☐	☐	☐	☒

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact

otherwise available for public water supplies?

IV. b The project will reduce the exposure of people to hazards associated with the discharge of urban runoff by diverting low, non-storm flows into subsurface saline groundwater and filtering the flow through several hundred feet of sand before it reaches the wave wash. The tide gate will be inserted only when the pump system is operating and not during rain events so that there should be no changes in the conveyance of storm water during a rain event.

IV.c The project will improve water quality of near-shore marine waters by providing natural sand filtration of urban runoff prior to discharge.

IV.e-h The project will create less than significant changes in the course and direction of water movement by directing urban runoff to subsurface discharge through several hundred feet of native sand providing filtering and dispersal of the discharge(discharge that would otherwise be to the ocean through a sand plug at the end of a storm drain pipe).

The project will include a monitoring plan to demonstrate the effectiveness of native sand filtration for treating indicator bacteria in urban runoff. The monitoring program will consist of a line of well points to monitor saline groundwater elevation and quality before and after installation of the infiltration trench. The monitoring plan will also include sand cores to document that the infiltration trench does not cause re-growth of indicator bacteria in unsaturated sand nor pose an increased risk to public health over the current method of discharge.

If the system does not provide the public benefits that are expecte,d the system can be easily abandoned and discharge of urban runoff can be returned to pre-project configuration. So the project does not create irreversible changes or conditions.

IV. i. The saline groundwater to which the project will discharge is not a potable supply because it is saline groundwater in hydrologic contact with coastal marine waters. The subsurface discharge of low flow urban runoff via the infiltration trench is not expected to create a measurable change in seawater intrusion rates or gradients; however the well points will allow measurement in changes in the elevation of saline groundwater to confirm this assumption.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
V. AIR QUALITY. *Would the proposal:*				
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☐	☒
b) Expose sensitive receptors to pollutants?	☐	☐	☐	☒
c) Alter air movement, moisture, or temperature, or cause any chance in climate?	☐	☐	☐	☒
d) Create objectionable odors?	☐	☐	☒	☐

V-a-c No impacts anticipated

V-d The project is expected to reduce or eliminate odors in the near by commercial district caused by standing water in the Pier Avenue storm drain system. The project itself is not expected to result in the generation of objectionable odors as long as it is properly maintained and operated.

VI. TRANSPORTATION/CIRCULATION.					
Would the proposal result in:					
a) Increased vehicle trips or traffic congestion?	☐	☐	☐	☒
b) Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
c) Inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
d) Insufficient parking capacity on-site or off-site?	☐	☐	☐	☒
e) Hazards or barriers for pedestrians or bicyclists?	☐	☐	☒	☐
f) Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒
g) Rail, waterborne or air traffic impacts?	☐	☐	☐	☒

VI-a-g The proposed project does not increase the intensity of use and will not create any barriers for bicyclists or pedestrians along the strand. Access structures for maintenance of the system will create minor impediments on the beach immediately along the strand wall, however this is a less than significant impact on recreational activity.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
VII. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*				
a) Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	☐	☐	☒	☒
b) Locally designated species (e.g. heritage trees) ?	☐	☐	☐	☒
c) Locally designed natural communities (e.g. oak forest, coastal habitat, etc.)?	☐	☐	☒	☐
d) Wetland habitat (e.g. marsh, riparian and vernal pool)?	☐	☐	☐	☒
e) Wildlife dispersal or migration corridors?	☐	☐	☐	☒

VII-a-e *The project is expected to have less than significant biological impacts during construction and no impact upon completion. To the south of the project, the U.S. Fish and Wildlife Service designated ten (10) acres of critical wintering habitat for the Pacific coast population of the western snowy plover (Charadrius alexandrinus nivosus) pursuant to the Endangered Species Act of 1973. This area, known as Subunit CA 21D, encompasses 0.25 linear miles of sandy open beach extending from 2nd Street to 6th Street in Hermosa Beach. It is not anticipated that the Project will extend into the designated critical habitat area. Although the draft recovery plan has not yet been finalized, the final rule designating critical habitat describes the primary threats that may require special management in this subunit as: disturbance from human recreational use as well as beach raking which removes the wrack line and reduces food resources. Since the completed project will be installed below ground and against the strand wall, long-term impacts on wintering habitat will be avoided should the snowy plover stray northward from the designated habitat into the project area.*

VIII. ENERGY AND MINERAL RESOURCES. *Would the proposal:*				
a) Conflict with adopted energy conservation plans?	☐	☐	☐	☒
b) Use non-renewable resources in a wasteful an inefficient manner?	☐	☐	☐	☒
c) Results in the loss of availability of a known mineral resource that would be of future value to the and the residents of the state?	☐	☐	☐	☒

VIII-a The proposed project would be required to be constructed to comply with energy conservation standards in the State's Uniform Building Code.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact

VIII-b The size of the project and the nature of the use will not involve significant or wasteful use of non-renewable resources. Application of the existing regulations is considered adequate to ensure that non-renewable resources would not be used in an inefficient or wasteful manner.

VIII-c There have been no significant mineral deposits identified at this site, or in the City of Hermosa Beach.

Source: City of Hermosa Beach General Plan, Conservation Element

IX. HAZARDS. *Would the proposal involve:*

a)	A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	☐	☐	☒	☐
b)	Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
c)	The creation of any health hazard or potential health hazard?	☐	☐	☒	☐
d)	Exposure of people to existing sources of potential health hazards?	☐	☐	☒	☐
e)	Increased fire hazard in areas with flammable brush, grass, or trees?	☐	☐	☐	☒

IX-a, c,d The proposed project does not increase risks due to hazards above those which are existing risks associated with discharges from the storm drain system. The project diverts and disperses those discharges below ground and should therefore reduce the risks of exposure to existing health hazards associated with storm drain discharges.

IX-b The project would not interfere with City-wide emergency response and evacuation plans..

IX-e The area is not characterized by existing flammable brush, grass, or trees, and the project would be constructed in compliance with fire safety standards.

X. NOISE. *Would the proposal result in:*

a)	Increases in existing noise levels?	☐	☐	☒	☐
b)	Exposure of people to severe noise levels?	☐	☐	☐	☒

X-a The proposed project is expected only to negligibly affect the pattern and volume of existing noise levels. Construction noise will temporarily impact noise levels. Long term impacts associated with intermittent operation of the below-ground pump station are expected to be less than significant..

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact

X-b No impact anticipated.

XI. PUBLIC SERVICES. *Would* the *proposal* have *an effect* upon, or result in a need for *new or altered government* services in any of the following *areas:*

a)	Fire protection?	☐	☐	☐	☒
b)	Police protection?	☐	☐	☐	☒
c)	Schools?	☐	☐	☐	☒
d)	Maintenance of public facilities, including roads?	☐	☐	☒	☐
e)	Other governmental services?	☐	☐	☐	☒

XI-d The project will create an expansion of the public storm drain system and will require ongoing operation and maintenance, however this impact is expected to be less than significant because it will be offset by improved public aesthetics and commercial business revenues due to elimination of odors associated with standing water in the existing storm drain system and reduced need for cleaning of the storm drain.

XII. UTILITIES AND SERVICE SYSTEMS. *Would the proposal result in a need for new systems or supplies, substantial alterations to the following utilities:*

a)	Power or natural gas?	☐	☐	☐	☒
b)	Communications systems?	☐	☐	☐	☒
c)	Local or regional water treatment or distribution facilities	☐	☐	☐	☒
d)	Sewer or septic tanks?	☐	☐	☐	☒
e)	Storm water drainage?	☐	☐	☐	☒
f)	Solid waste disposal?	☐	☐	☐	☒
g)	Local or regional water supplies?	☐	☐	☐	☒

XIII. AESTHETICS. *Would the proposal:*

a)	Affect a scenic vista or scenic highway?	☐	☐	☐	☒

Issues (and Supporting Information Sources):		Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Have a demonstrable negative aesthetic effect?	☐	☐	☒	☐
c)	Create light or glare?	☐	☐	☐	☒

XIII-a. Since the project is located below ground against the strand wall, and only minor appurtenances will be visible above ground level, the project will have no impact on scenic beach and ocean vistas..

XIII-b: The project will have a less than significant aesthetic impact, and to the contrary will likely have a positive aesthetic effect by reducing odors in the downtown area.

XIV. CULTURAL RESOURCES. *Would the proposal:*					
a)	Disturb paleontological resources?	☐	☐	☐	☒
b)	Disturb archaeological resources?	☐	☐	☐	☒
c)	Affect historical resources?	☐	☐	☐	☒
d)	Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☐	☒
e)	Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

XIV-a-e There are no known cultural resources associate with this project site.

XV. RECREATION. *Would the proposal:*					
a)	Increase the demand for neighborhood or regional parks or other recreational facilities?	☐	☐	☐	☒
b)	Affect existing recreational opportunities?	☐	☐	☐	☒

XV-a-b The Project is expected to enhance existing recreational opportunities by reducing the frequency of beach postings, and it may have a small but less than significant increase in demand for beach use if the water quality of the beach is perceived by the public to be of higher quality than other nearby beaches.

XVI. MANDATORY FINDINGS OF SIGNIFICANCE.					
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the	☐	☐	☐	☒

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless mitigation Incorporated	Less Than Significant Impact	No Impact
habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☐	☒
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

XVII. SUPPORTING INFORMATION SOURCES.

a) **Supporting Information Sources**. (The following are sources used and referred to in the initial study, and are incorporated herein by reference. All are available for review in the Community Development Department, Planning Division of the City of Hermosa Beach)

1. General Plan for the City of Hermosa Beach (Land Use Element revised 1994)

2. City of Hermosa Beach Municipal Code